



Attorney's Docket No. 5470-130DV

GAU1646  
DRAFT 8/22/01  
PATENT AUG 17 2001  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: French et al.

Serial No.: 09/497,822

Filed: February 3, 2000

For: *ANDROGEN RECEPTOR PROTEINS, RECOMBINANT DNA MOLECULES  
CODING FOR SUCH, AND USE OF SUCH COMPOSITIONS*

Date: August 13, 2001

BOX SEQUENCE  
Commissioner for Patents  
Washington, DC 20231

**STATEMENT IN SUPPORT OF FILING A  
SUBSTITUTE SEQUENCE LISTING UNDER 37 CFR § 1.821(f) and §1.825(b)**

Sir:

Applicants are submitting herewith substitute copies of the paper and computer-readable Sequence Listings in compliance with 37 C.F.R. § 1.821 to 1.825. The original copies of the Sequence Listing were filed on July 31, 2001.

Upon review of the initial submission, Applicants noticed an inadvertent error in the amino acid sequence of SEQ ID NO:21 (rat androgen receptor). Due to technical difficulties with the PatentIn software, the translation of the nucleotide sequence of SEQ ID NO:20 was erroneously started three nucleotides 5' of the actual translation start site of the androgen receptor. Thus, the amino acid sequence of SEQ ID NO:21 in the previously submitted copies of the Sequence Listings started as "Arg Met" instead of "Met." The correction of this error in the new Sequence Listings is supported by the specification as originally filed in Figure 6.

I hereby state that the content of the paper and computer readable copies of the substitute Sequence Listings, submitted concurrently herewith in accordance with 37 CFR §1.821 and §1.825, are the same. I also hereby state as required by 37 CFR § 1.821(f) and §1.825(b) that the paper and computer readable copies contain no new matter, nor do they go beyond the disclosure of the application as filed.

Respectfully submitted,

  
Karen A. Magri  
Registration No. 41,965

**Customer Number:**



**20792**

PATENT TRADEMARK OFFICE

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner For Patents, Washington, DC 20231, on August 13, 2001.

  
Traci A. Brown  
Date of Signature: August 13, 2001  
206961



SEQUENCE LISTING

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<110> French, Frank  
Wilson, Elizabeth  
Joseph, David  
Lubahn, Dennis

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<141> 2000-02-03

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AUG 17 2001

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Pro Pro Gly Ala Ser Leu Leu Leu Gln Gln Gln Gln Gln Gln Gln  
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Gln  
65 70 75 80

Gln Gln Glu Thr Ser Pro Arg Gln Gln Gln Gln Gln Gly Glu Asp  
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Gly Ser Pro Gln Ala His Arg Arg Gly Pro Thr Gly Tyr Leu Val Leu  
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Asp Glu Glu Gln Gln Pro Ser Gln Pro Gln Ser Ala Leu Glu Cys His  
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Trp Ala Ala Ala Ala Ala Gln Cys Arg Tyr Gly Asp Leu Ala Ser Leu  
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Ala Ser Ser Ser Trp His Thr Leu Phe Thr Ala Glu Glu Gly Gln Leu  
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Gln Met Ala Val Ile Gln Tyr Ser Trp Met Gly Leu Met Val Phe Ala  
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Met Gly Trp Arg Ser Phe Thr Asn Val Asn Ser Arg Met Leu Tyr Phe  
755 760 765

Ala Pro Asp Leu Val Phe Asn Glu Tyr Arg Met His Lys Ser Arg Met  
770 775 780

Tyr Ser Gln Cys Val Arg Met Arg His Leu Ser Gln Glu Phe Gly Trp  
785 790 795 800

Leu Gln Ile Thr Pro Gln Glu Phe Leu Cys Met Lys Ala Leu Leu Leu  
805 810 815

Phe Ser Ile Ile Pro Val Asp Gly Leu Lys Asn Gln Lys Phe Phe Asp  
820 825 830

Glu Leu Arg Met Asn Tyr Ile Lys Glu Leu Asp Arg Ile Ile Ala Cys  
835 840 845

Lys Arg Lys Asn Pro Thr Ser Cys Ser Arg Arg Phe Tyr Gln Leu Thr  
850 855 860

Lys Leu Leu Asp Ser Val Gln Pro Ile Ala Arg Glu Leu His Gln Phe  
865 870 875 880

Thr Phe Asp Leu Leu Ile Lys Ser His Met Val Ser Val Asp Phe Pro  
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Glu Met Met Ala Glu Ile Ile Ser Val Gln Val Pro Lys Ile Leu Ser  
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Gly Lys Val Lys Pro Ile Tyr Phe His Thr Gln  
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<211> 4288

<212> DNA

<213> Rattus rattus

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<211> 996

<212> PRT

<213> Rattus rattus

<400> 21

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Ala	Ile	Gln	Asn	Pro	Gly	Pro	Arg	His	Pro	Glu	Ala	Ala	Ser	Ile	Ala
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Pro	Pro	Gly	Ala	Cys	Leu	Gln	Gln	Arg	Gln	Glu	Thr	Ser	Pro	Arg	Arg
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Arg	Arg	Arg	Gln	Gln	His	Pro	Glu	Asp	Gly	Ser	Pro	Gln	Ala	His	Ile
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Arg	Gly	Thr	Thr	Gly	Tyr	Leu	Ala	Leu	Glu	Glu	Glu	Gln	Gln	Pro	Ser
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Gln	Gln	Gln	Ser	Ala	Ser	Glu	Gly	His	Pro	Glu	Ser	Gly	Cys	Leu	Pro
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Glu	Pro	Gly	Ala	Ala	Thr	Ala	Pro	Gly	Lys	Gly	Leu	Pro	Gln	Gln	Pro
115						120						125			

Pro	Ala	Pro	Pro	Asp	Gln	Asp	Asp	Ser	Ala	Ala	Pro	Ser	Thr	Leu	Ser
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Lys Asp Ile Leu Ser Glu Ala Gly Thr Met Gln Leu Leu Gln Gln Gln  
165 170 175

Gln  
180 185 190

Gln Gln Gln Glu Val Ile Ser Glu Gly Ser Ser Ser Val Arg Ala Arg  
195 200 205

Glu Ala Thr Gly Ala Pro Ser Ser Ser Lys Asp Ser Tyr Leu Gly Gly  
210 215 220

Asn Ser Thr Ile Ser Asp Ser Ala Lys Glu Leu Cys Lys Ala Val Ser  
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Val Ser Met Gly Leu Gly Val Glu Ala Leu Glu His Leu Ser Pro Gly  
245 250 255

Glu Gln Leu Arg Gly Asp Cys Met Tyr Ala Ser Leu Leu Gly Gly Pro  
260 265 270

Pro Ala Val Arg Pro Thr Pro Cys Ala Pro Leu Ala Glu Cys Lys Gly  
275 280 285

Leu Ser Leu Asp Glu Gly Pro Gly Lys Gly Thr Glu Glu Thr Ala Glu  
290 295 300

Tyr Ser Ser Phe Lys Gly Gly Tyr Ala Lys Gly Leu Glu Gly Glu Ser  
305 310 315 320

Leu Gly Cys Ser Gly Ser Ser Glu Ala Gly Ser Ser Gly Thr Leu Glu  
325 330 335

Ile Pro Ser Ser Leu Ser Leu Tyr Lys Ser Gly Ala Val Asp Glu Ala  
340 345 350

Ala Ala Tyr Gln Asn Arg Asp Tyr Tyr Asn Phe Pro Leu Ala Leu Ser  
355 360 365

Gly Pro Pro His Pro Pro Pro Pro Thr His Pro His Ala Arg Ile Lys  
370 375 380

Leu Glu Asn Pro Ser Asp Tyr Gly Ser Ala Trp Ala Ala Ala Ala Ala  
385 390 395 400

Gln Cys Arg Tyr Gly Asp Leu Ala Ser Leu His Gly Gly Ser Val Ala  
405 410 415

Gly Pro Ser Thr Gly Ser Pro Pro Ala Thr Ala Ser Ser Ser Trp His  
420 425 430

Thr Leu Phe Thr Ala Glu Glu Gly Gln Leu Tyr Gly Pro Gly Gly  
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Gly Gly Ser Ser Ser Pro Ser Asp Ala Gly Pro Val Ala Pro Tyr Gly  
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Tyr Thr Arg Pro Pro Gln Gly Leu Ala Ser Gln Glu Gly Asp Phe Ser  
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Ala Ser Glu Val Trp Tyr Pro Gly Gly Val Val Asn Arg Val Pro Tyr  
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Pro Ser Pro Ser Cys Val Lys Ser Glu Met Gly Pro Trp Met Glu Asn  
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Tyr Ser Gly Pro Tyr Gly Asp Met Arg Leu Asp Ser Thr Arg Asp His  
515 520 525

Val Leu Pro Ile Asp Tyr Tyr Phe Pro Pro Gln Lys Thr Cys Leu Ile  
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Cys Gly Asp Glu Ala Ser Gly Cys His Tyr Gly Ala Leu Thr Cys Gly  
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Ser Cys Lys Val Phe Phe Lys Arg Ala Ala Glu Gly Lys Gln Lys Tyr  
565 570 575

Leu Cys Ala Ser Arg Asn Asp Cys Thr Ile Asp Lys Phe Arg Arg Lys  
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Asn Cys Pro Ser Cys Arg Leu Arg Lys Cys Tyr Glu Ala Gly Met Thr  
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Leu Gly Ala Arg Lys Leu Lys Leu Gly Asn Leu Lys Leu Gln Glu  
610 615 620

Glu Gly Glu Asn Ser Ser Ala Gly Ser Pro Thr Glu Asp Pro Ser Gln  
625 630 635 640

Lys Met Thr Val Ser His Ile Glu Gly Tyr Glu Cys Gln Pro Ile Phe  
645 650 655

Leu Asn Val Leu Glu Ala Ile Glu Pro Gly Val Val Cys Ala Gly His

660

665

670

Asp Asn Asn Gln Pro Asp Ser Phe Ala Ala Leu Leu Ser Ser Leu Asn  
 675 680 685

Glu Leu Gly Glu Arg Gln Leu Val His Val Val Lys Trp Ala Lys Ala  
 690 695 700

Leu Pro Gly Phe Arg Asn Leu His Val Asp Asp Gln Met Ala Val Ile  
 705 710 715 720

Gln Tyr Ser Trp Met Gly Leu Met Val Phe Ala Met Gly Trp Arg Ser  
 725 730 735

Phe Thr Asn Val Asn Ser Arg Met Leu Tyr Phe Ala Pro Asp Leu Val  
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Phe Asn Glu Tyr Arg Met His Lys Ser Arg Met Tyr Ser Gln Cys Val  
 755 760 765

Arg Met Arg His Leu Ser Gln Glu Phe Gly Trp Leu Gln Ile Thr Pro  
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Gln Glu Phe Leu Cys Met Lys Ala Leu Leu Leu Phe Ser Ile Ile Pro  
 785 790 795 800

Val Asp Gly Leu Lys Asn Gln Lys Phe Phe Asp Glu Leu Arg Met Asn  
 805 810 815

Tyr Ile Lys Glu Leu Asp Arg Ile Ile Ala Cys Lys Arg Lys Asn Pro  
 820 825 830

Thr Ser Cys Ser Arg Arg Phe Tyr Gln Leu Thr Lys Leu Leu Asp Ser  
 835 840 845

Val Gln Pro Ile Ala Arg Glu Leu His Gln Phe Thr Phe Asp Leu Leu  
 850 855 860

Ile Lys Ser His Met Val Ser Val Asp Phe Pro Glu Met Met Ala Glu  
 865 870 875 880

Ile Ile Ser Val Gln Val Pro Lys Ile Leu Ser Gly Lys Val Ser Pro  
 885 890 895

Cys Ile Ser Thr His Ser Glu Asp Leu Glu Pro Asn Thr Gln Thr His  
 900 905 910

Leu Phe Pro Phe Gln Met Ser Ser Ala Cys Tyr Ile Thr Leu His Tyr  
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Phe Ser Gly Met Gly Leu Gly Gly Asn Ser Ser Thr Asp Val Gln Ser  
930 935 940

Val Met Asn Met Phe Pro Lys Phe Tyr Phe Leu Gly Phe Ser Phe Phe  
945 950 955 960

Leu Phe Leu Leu Leu Cys Leu Phe Tyr Pro Pro Met Ala His Phe Glu  
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Ser Ala Ala Cys Cys Gly Ser Cys Leu Cys Phe Glu Phe Cys Cys Ile  
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Ser Ser Ser Leu  
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<210> 24

<211> 32

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<210> 25

<211> 38

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<223> Synthetic Oligonucleotide Probe B.

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*bul*  
*D1*  
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<210> 26

<211> 15

<212> PRT

<213> Artificial Sequence

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<223> Synthetic Peptide.

<400> 26

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